

Title (en)

HIGH-MODULUS LOW-SHRINKAGE POLYESTER INDUSTRIAL YARN AND PREPARATION METHOD THEREFOR

Title (de)

POLYESTER-INDUSTRIEGARN MIT HOHEM MODULUS UND GERINGER SCHRUMPFUNG SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FIL INDUSTRIEL EN POLYESTER À HAUT MODULE D'ÉLASTICITÉ ET À FAIBLE RETRAIT ET SON PROCÉDÉ DE PRÉPARATION

Publication

EP 3348594 C0 20240306 (EN)

Application

EP 16880430 A 20160612

Priority

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Abstract (en)

[origin: EP3348594A1] A high-modulus low-shrinkage polyester industrial yarn obtained by subjecting a polyester to dissolution, washing and solid state polycondensation followed by spinning. The high-modulus low-shrinkage polyester industrial yarn has a dry heat shrinkage rate of $2.0 \pm 0.25\%$ under test conditions of $177^\circ\text{C} \times 10\text{min} \times 0.05\text{cN/dtex}$. The average value of the crystal volume V_c of the high-modulus low-shrinkage polyester industrial yarn is larger than 230nm^3 . The high-modulus low-shrinkage polyester industrial yarn has a fiber modulus of $\geq 100\text{ cN/dtex}$. The polycondensation catalyst consists of magnesium ethylene glycol and antimony ethylene glycol, which has a small thermal degradation coefficient.

IPC 8 full level

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CPC (source: CN EP US)

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